



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,137	10/27/2003	Brian F. Jackman		3245

7590 06/06/2005
BRIAN F. JACKMAN
39 PARK ST.
HUDSON, MA 01749

EXAMINER

KHAIRA, NAVNEET K

ART UNIT	PAPER NUMBER
----------	--------------

3754

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/694,137	JACKMAN, BRIAN	
	Examiner	Art Unit	
	Navneet Sonia Khaira	3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 2 line 2: delete "of claim 1". Claim improperly written.
Claim 3 line 2: delete "of claim 1". Claim improperly written.
Claim 3 lines 3-4: delete "of claim 1". Claim improperly written.
Claim 5 line 2: delete "of claim 1". Claim improperly written.
Claim 6 line 2: delete "of claim 1". Claim improperly written.
Claim 12 line 3: delete "of claim 1". Claim improperly written.
Claim 13 line 2: delete "of claim 1". Claim improperly written.
Claim 14 line 3: delete "of claim 1". Claim improperly written.
Appropriate corrections are required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (4,830,231) in view of Galbierz (US 3,071,294).

Referring to claims 1 and 2, Smith discloses a cartridge type container (10, fig 1) used in combination with an application gun (14, fig 1) for dispensing a volume of flowable material (12, col 1, lines 11-22) comprised of a hollow cylindrical tube (24) sealed at one end by a wall (bottom, fig 2) with an interior opening in its base that incorporates a peripheral interior surface (rolled rim 30), cartridge with an opposite end of the cartridge sealed by a sliding interior piston (26) that pressurizes the cartridge (10) when the piston (26) is advanced by the plunger (18) of the application gun (14, fig 1) along with seal (fig 3) being of sufficient weakness to allow the seal (layer 46) to break open only in the configuration of the breaking pattern (x-shapes in layer 46 in fig 3). Furthermore, Smith discloses an improved multi-layered self opening closure seal (fig 3) for sealing over the interior opening (open end of dispensing gun 14, fig 1), cartridge (10) constructed of a first layer of unbroken (42, fig 1) frangible material (42, made of foil) that is bonded to an additional layer (40) of material that contains at least one cut (opening 44) forms a breaking pattern (circle) that turns the additional layer (layer 46) into a break and tear template layer (layer 46) and that when bonded to the first frangible layer (42) strengthens the surface area of the first frangible layer (42) everywhere except in the area of the breaking pattern (breaking pattern of x shapes in 46) by leaving only the first frangible layer (42) covering over the cut configuration of the breaking pattern (x-shapes in layer 46, and circle in layer 36) of the additional template layers (40 and 46) which leaves a weakness in the multi layered seal only in the area of the breaking pattern (circle in layer 40 and x-shapes in layer 46). Smith discloses a peel

Art Unit: 3754

away exterior layer 42 instead of a hollow dispensing nozzle with an exterior break away frangible layer as claimed.

Galbeirz discloses a frangible layer bonded to an interior opening of a nozzle (15). The frangible layer area breaks open allowing the continued flowable material to dispense out through the broken portion of the frangible seal. The seal is bonded over the interior opening of the nozzle (col 3, lines 29-32) and sufficient internal pressure is brought to bear against the seal by advancing the sliding interior piston of the cartridge with the plunger of the application gun (col 3, lines 34-41).

It would have been obvious to one of ordinary skill in the art to modify the dispensing gun of Smith by replacing the peel away seal with a frangible exterior layer bonded to an interior opening of a nozzle as taught by Galbrierz in order to simplify the process for the user by eliminating the peel away step of the seal from the cartridge, and in order to provide better control of the flow pattern of the material being dispensed.

Referring to claim 3, Smith further discloses the breaking pattern (fig 3, layer 46) configuration includes at least one unbroken area (52) that connects at least one central portion of the seal that would break open outwardly when the force of the contained flowable material of the cartridge dispensing out of the cartridge when the seal breaks open to the annular portion of the seal remaining bonded (col 3, lines 38-40) to the peripheral interior surface area around the interior opening (rim 30) of the cartridge and keeping the central portions from breaking off and contaminating the material when

Art Unit: 3754

dispensed according to the claim but does not include a nozzle. Galbrierz discloses a nozzle which can be attached to the end of the dispenser 10.

It would have been obvious to one of ordinary skill in the art to have combined dispensing nozzle of Galbierz and attached it to the end of the dispensing device of Smith and allow the disk to seal the interior opening of the nozzle by at least one layer of adhesive instead of the rim 30 in order to provide better control of the flow pattern of the material being dispensed.

Referring to claim 4, Smith further discloses the breaking pattern on disk 46 is in a X shaped configuration (fig 3).

Referring to claims 5 and 6, Smith discloses a dispenser template layer side of the seal is bonded to the peripheral interior surface area (rolled rim 30) but does not disclose a nozzle at the end of the dispenser in which the seal is in the interior opening of the nozzle of the cartridge covering the interior opening of the nozzle. Galbrierz discloses a nozzle which can be attached to the end of the dispenser 10 and also discloses a seal which is placed in the interior opening of the nozzle of the cartridge covering the interior opening of the nozzle in fig 1.

It would have been obvious to one of ordinary skill in the art to have combined the dispensing nozzle of Galbierz and attached it to the end of the dispensing device of Smith and allow the frangible layer side of the seal to close the interior opening of the

Art Unit: 3754

nozzle instead of the rim 30 in order to eliminate seepage at the connection between the spout and the cartridge after the seal is broken as taught by Galbierz.

Referring to claim 7, Smith further discloses the frangible layer is foil sealing strip (col 3, line 36).

Referring to claim 8, Smith further discloses template layer is made up of one or more layers (36, 40) of the same or different materials wherein the materials include; metal foil, polymers, plastic, paper or adhesive (col 3, lines 30-31).

Referring to claims 9 and 10, Smith further discloses multiple layers of seals on the end disk. It would have been obvious to one of ordinary skill in the to arrange the seals in any order desired. The number of the template and frangible layers in a disk could vary depending on how rigid the manufacturer needs it's seal to be. Furthermore, if the disk consists of more than two seals, it would be obvious to one of ordinary skill in the art to have bonded the two outer layers on both sides of a middle layer.

Referring to claim 11, Smith further discloses the frangible layer (42) is bonded to the template layer by at least one layer of adhesive (col 4, lines 38-40).

Referring to claim 12, Smith further discloses the adhesive layer 48 in fig 3 is only applied where bonding is needed, and the cut out void configuration of the breaking pattern of the template layer center is free of adhesive.

Referring to 13, Smith further discloses the seal disk is bonded to the interior surface opening (rolled rim 30) by a food grade adhesive (34) but does not disclose a nozzle attached to the rim. Galbrierz discloses a nozzle which can be attached to the end of the dispenser 10.

It would have been obvious to one of ordinary skill in the art to have combined dispensing nozzle of Galbierz and attached it to the end of the dispensing device of Smith and allow the disk to seal the interior opening of the nozzle by at least one layer of adhesive instead of the rim 30 in order to provide better continue flow pattern of the material being dispensed as taught by Galbierz.

Referring to claim 14, Smith further discloses the adhesive layer 48 in fig 3 is only applied where bonding is needed, and the cut out void configuration of the breaking pattern of the template layer center is free of adhesive.

Referring to claim 15, Smith further discloses the frangible layer is bonded to the template layer by non adhesive (heat seal) means such as cladding or fusion bonding and the like (col 4, lines 44-45).

Referring to claim 16, Smith further discloses the flowable material in the cartridge includes food sauces (col 1, line 12)

Referring to claim 17, Smith discloses a cartridge type container (10, fig 1) used in combination with an application gun (14, fig 1) for dispensing a volume of flowable material (12, col 1, lines 11-22) comprised of a hollow cylindrical tube (24) sealed at one end by a wall (bottom, fig 2) with an interior opening in its base that incorporates a peripheral interior surface (rolled rim 30), cartridge with an opposite end of the cartridge sealed by a sliding interior piston (26) that pressurizes the cartridge (10) when the piston (26) is advanced by the plunger (18) of the application gun (14, fig 1) along with seal (fig 3) being of sufficient weakness to allow the seal (layer 46) to break open only in the configuration of the breaking pattern (x-shapes in layer 46 in fig 3). Furthermore, Smith discloses an improved multi-layered self opening closure seal (fig 3) for sealing over the interior opening (open end of dispensing gun 14, fig 1), cartridge (10) constructed of a first layer of unbroken (42, fig 1) frangible material (42, made of foil) that is bonded to an additional layer (40) of material that contains at least one cut (opening 44) forms a breaking pattern (circle) that turns the additional layer (layer 46) into a break and tear template layer (layer 46) and that when bonded to the first frangible layer (42) strengthens the surface area of the first frangible layer (42) everywhere except in the area of the breaking pattern (breaking pattern of x shapes in 46) by leaving only the first frangible layer (42) covering over the cut configuration of the breaking pattern (x-shapes in layer 46, and circle in layer 36) of the additional template

Art Unit: 3754

layers (40 and 46) which leaves a weakness in the multi layered seal only in the area of the breaking pattern (circle in layer 40 and x-shapes in layer 46). but does not disclose a hollow exterior dispensing nozzle frangible layer which breaks open. Smith also discloses a peel away exterior first layer (42).

Smith further discloses in fig 3, wherein the bonding means bonding the frangible layer to the template layer (col 3, lines 34- 40) includes a voided area (circle of disk 40) that duplicates the cut out void configuration of the breaking pattern (rest of the disks have the same void circle configuration).

Smith further discloses the cut (x-shapes, fig 3) out void configurations of the breaking pattern of the template layer (46) creates a weakness in the seal only in the area of the breaking pattern (x-shapes) by leaving only the first frangible layer (42) covering over the cut out (x-shapes) of the breaking pattern.

Smith further discloses the breaking pattern (fig 3, layer 46) configuration includes at least one unbroken area (52) that connects at least one the central portion of the seal that would break open outwardly when the force of the contained flowable material of the cartridge dispensing out of the cartridge when the seal breaks open to the annular portion of the seal remaining bonded (col 3, lines 38-40) to the peripheral interior surface area around the interior opening (rim 30) of the cartridge and keeping the central portions from breaking off and contaminating the material when dispensed.

Smith further discloses the frangible layer is foil sealing strip (col 3, line 36).

Smith further discloses the template layer is a polyester disk (col 3, line 44).

Smith further discloses the flowable material in the cartridge includes food sauces (col 1, line 12).

Galbeirz discloses a frangible layer bonded to an interior opening of a nozzle (15). The frangible layer area breaks open allowing the continued flowable material to dispense out through the broken portion of the frangible seal. The seal is bonded over the interior opening of the nozzle (col 3, lines 29-32) and sufficient internal pressure is brought to bear against the seal by advancing the sliding interior piston of the cartridge with the plunger of the application gun (col 3, lines 34-41). Galbrierz discloses a nozzle (15, fig 1) and frangible seal which can be attached to the end of the dispenser of Smith, with interior opening (21, fig 1) of the nozzle (15, fig 1) of the cartridge which would be perpendicular to the bore (23, fig 2) of the nozzle (15, fig 1) providing mean for bonding an improved frangible seal (24) over the interior opening (opposite end of 21, fig 2) of the nozzle (15, fig 2) of the cartridge.

It would have been obvious to one of ordinary skill in the art to modify the dispensing gun of Smith by replacing the peel away seal with a frangible exterior layer bonded to an interior opening of a nozzle as taught by Galbrierz in order to simplify the process for the user by eliminating the peel away step of the seal from the cartridge, and in order to provide better control of the flow pattern of the material being dispensed.

It would have been further obvious to one skilled in the art to have the frangible layer of Galbrierz bonded to an additional strengthening layer (46) that contains at least one cut out void (circle) configuration that forms a breaking pattern (x- shapes in 46)

Art Unit: 3754

that turns the strengthening layer into a break and tear template layer (46) in order to have a more rigid seal and strengthen the template layer during dispensing.

It would have been further obvious to one skilled in the art to have Galbierz's frangible layer (24) of the seal bonded over the interior opening of the nozzle (15, fig 1) in order to provide a better sealing arrangement.

Citation of Related Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Okamura et al (US 6,234,348), Chester (US 3,241,726), Boring et al (US 5,560,521), Kamin (US 4, 356,935) and Patterson (US 6,457,613) references also cartridge assemblies with seals.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navneet Sonia Khaira whose telephone number is 571-272-7142. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mar Y. Michael can be reached on 571-272-4906. The fax phone number for the organization where this application or proceeding is assigned is 571-273-7142.

Art Unit: 3754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



NK

Navneet Sonia Khaira
Examiner
Art Unit 3754



MICHAEL MAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700